

Abstract

5 Described are powders for use in the production of  
three-dimensional structures or molded bodies by means of  
layered manufacturing methods, and methods for the eco-  
nomical production thereof. The powders have the particu-  
10 larity that they have a good flow behavior, on the one  
hand, and that they are simultaneously configured such  
that the molded body produced with the powder in rapid  
prototyping has substantially improved mechanical and/or  
thermal characteristics. In accordance with a particu-  
15 larly advantageous embodiment, the powder comprises a  
first fraction that is present in the form of substan-  
tially spherical powder particles and that is formed by a  
matrix material, and at least one further fraction in the  
form of strengthening and/or reinforcing fibers that are  
preferably embedded into the matrix material.

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